May 27, 2009

Empowering Public Education Through Online Learning

Peter Stewart
Curtis Johnson
Agenda

• Introduction
  • Curtis Johnson, Author
    – Curtis has written a business style book about the education market and will describe how the category is going through a disruptive period
• Peter Stewart, K12
  – Peter will discuss how a leading education company is working through these disruptions and finding opportunities to foster the evolution of education
• Discussion/Q&A
Does your district or school offer an online learning program?

A. We currently offer a full-time program for our students
B. We currently offer a few online courses for our students
C. We will implement an online learning program in Fall 2009
D. We are exploring online learning programs for implementation in the next 6-12 months
E. I am not associated with a school or district
Have you read *Disrupting Class*?

A. Yes
B. No
Empowering Public Education Through Online Learning

Peter Stewart
Senior Vice President of School Development, K12 Inc.

Peter works with parents, teachers, community groups, school districts, school boards, departments of education, and policy makers to start new high-tech schools that use the K¹² academic program. Formerly a head of school, a teacher, a principal, and a curriculum director, Peter has experience with urban, rural, and international schools.

Curtis Johnson
Managing Partner, Education Evolving and Co-Author, Disrupting Class

A long-time writer of public policy issues, Curt has written several books and hundreds of feature length articles. He’s also been the head of a citizen think tank, a policy adviser and chief of staff to a Minnesota governor, a teacher and a community college president.
Disruptive Technologies: A driver of leadership failure and the source of new growth opportunities

Incumbents nearly always win
Sustaining innovations
Performance that customers can utilize or absorb

Pace of Technological Progress

Disruptive innovations
Entrants nearly always win

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Disruption in business models has been the dominant historical mechanism for making things more affordable and accessible

<table>
<thead>
<tr>
<th>Yesterday</th>
<th>Today</th>
<th>Tomorrow</th>
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<tbody>
<tr>
<td>Ford</td>
<td>Toyota</td>
<td>Chery</td>
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<td>Dept. Stores</td>
<td>Wal-Mart</td>
<td>Internet Retail</td>
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<td>Delta</td>
<td>Southwest Airlines</td>
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<td>IBM</td>
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<td>Dillon, Read</td>
<td>Merrill Lynch</td>
<td>E-Trade</td>
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<td>Sony DiskMan</td>
<td>Apple iPod</td>
<td>Cell Phones</td>
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### Worn Out Assumptions vs. Emerging Realities

<table>
<thead>
<tr>
<th>Worn Out Assumptions</th>
<th>Emerging Realities</th>
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<tbody>
<tr>
<td>Knowledge scarce, hard to access</td>
<td>Knowledge readily available</td>
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<tr>
<td>Subjects – courses – sequence</td>
<td>Multi-dimensional learning</td>
</tr>
<tr>
<td>Improvement by command</td>
<td>Crucial role of motivation</td>
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<tr>
<td>Students learn same way/same time</td>
<td>Kids more different than ever</td>
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<td>Standardization – batch processing</td>
<td>Radical personalization</td>
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</table>
We all learn differently

Linguistic
Logical-mathematical
Spatial
Bodily-kinesthetic
Musical
Interpersonal
Intrapersonal
Naturalist

Multiple Intelligences

Learning Styles
Visual
Written
Aural
Playful
Deliberate

Paces of Learning
Fast
Medium
Slow

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Perfect opportunity to implement computer-based learning disruptively

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The substitution of one thing for another always follows an S-curve pattern.
K¹²’s Products and Services:
“Everything you need to provide a child with a world-class education, anytime, anywhere!”

- Engaging lessons, in every core subject, on every day of every week – K-12
- Thorough online and off-line curriculum augmented with multi-media, flash and video/audio clips, Internet links, and educational games
- Training materials closely integrated with the instructional materials, whether for classroom or home
- Initial and ongoing assessments to get children in at the right place, and ensure mastery
- Services to simplify planning and progress tracking
- 55,000+ students
- 1,500+ teachers
- 15,000+ hours of instruction, K-12
Guiding principles from cognitive science and rich experience

• Use “tried and true” educational approaches for Instruction
• Use technology *appropriately* for learning
• Build objectives based on “Big Ideas” supported by rich content
• To ensure mastery, assess every objective
• Vary the correct level, pace, and hours spent on each objective for each child
• Expect and provide for more effort for important, hard objectives
Leads to engaging, compelling, cognitive-science driven learning media...

What happens to gas molecules...

Boyle didn’t know about atoms—or anything like us today. We do, so let’s look at a cylinder with a piston...

You will note that the relationship between pressure and volume is an inverse relationship. As one increases, the other decreases.

The cylinder contains a fixed amount of gas at a constant temperature. At any given pressure, the volume of the container is inversely proportional to the number of gas molecules. If you increase the pressure by adding weight, the gas molecules will hit the walls more often and the volume will decrease.

Now add weight or press down on the piston until the pressure inside the cylinder is equal to the pressure outside. With the volume of the molecules squeezed closer together the number of collisions of gas molecules increases, and as a result the pressure increases.
...and useful tools to keep learning on-track
### How K12 fits the disruptive model

<table>
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<tr>
<th>Characteristic</th>
<th>K12 experience</th>
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<tbody>
<tr>
<td>Inferior to mainstream products and services</td>
<td>Wait until you see 3.0</td>
</tr>
<tr>
<td>Appeals only to those not well-served</td>
<td>Indeed – most newcomers looking for a solution to an education problem</td>
</tr>
<tr>
<td>Usually ignored if not welcomed</td>
<td>Homeschoolers, G/T, kids with deep hobbies, unusual learners, “picked on” kids – little attention</td>
</tr>
<tr>
<td>Gets better</td>
<td>Indeed – rich feedback loops, with fast turn-around allow us to improve every month</td>
</tr>
<tr>
<td>Erodes market share/becomes dominant</td>
<td>Hopefully.</td>
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K12 Models

Classroom
- North Panola Public Schools, MS
- Draper Elementary, DC

Hybrid
- Chicago Virtual Charter School, IL
- Single Course Sales (powerspeak\textsuperscript{12}, G&T, Teen Parents, Career Tech, Summer School)

Full Time Virtual
- Lawrence, KS
- Florida Virtual Academy
What obstacles do you face in implementing an online learning program?

A. Curriculum: We can’t create the content, and we’re not sure which resources are available/superior.

B. Cost: How will we fund this?

C. Systems Architecture: We don’t have the administrative system in place to ensure a great program.

D. Support: If we implement a program, what ongoing support will we have (e.g. Teacher Training)?

E. Other
For more information, visit k12.com/educators

Or email us at partnerships@k12.com

Purchase *Disrupting Class* at amazon.com

THANK YOU!